Amerila D 99/080/127

Claims 1-206 (canceled).

Claim 267 (previously presented): An isolated secreted polypeptide having aminopeptidase activity with physicochemical properties of (i) a pH optimum in the range of from about pH 7.27 to about pH 10.95 determined at ambient temperature in the presence of Ala-para-nitroanilide; (ii) a temperature stability of 90% or more, relative to initial activity, at pH 7.5 determined after incubation for 20 minutes at 60°C in the absence of substrate; (iii) a temperature stability of 64% or more, relative to initial activity, at pH 7.5 determined after incubation for 20 minutes at 70°C in the absence of substrate; and (iv) an ability to hydrolyze a substrate containing Ala, Arg, Asn, Asp, Cys, Gln, Glu, Gly, His, Ile, Leu, Lys, Phe, Pro, Ser, Thr, Trp, Tyr, or Val at its N-terminus, selected from the group consisting of:

- (a) a polypeptide having an amino acid sequence which has at least 90% identity with the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2;
- (b) a polypeptide which is encoded by a nucleic acid sequence which hybridizes under medium stringency conditions with (i) the nucleic acid sequence of nucleotides 46 to 1488 of SEQ ID NO:1, or (ii) its full complementary strand, wherein medium stringency conditions are defined as prehybridization and hybridization at 42°C in 5X SSPE, 0.3% SDS, 200 μ g/ml sheared and denatured salmon sperm DNA, and 35% formamide; and
 - (c) a fragment of (a) or (b), wherein the fragment has aminopeptidase activity;

wherein the polypeptide having aminopeptidase activity sequentially removes one amino acid residue at a time from the N-terminus of a peptide, polypeptide, or protein.

Claim 208 (previously presented): The polypeptide of claim 201, comprising an amino acid sequence which has at least 90% identity with the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2.

Claim 200 (previously presented): The polypeptide of claim 200, comprising an amino acid sequence which has at least 95% identity with the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2.

Claim 210 (previously presented): The polypeptide of claim 295, comprising an amino acid sequence which has at least 97% identity with the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2.

Claim (previously presented): The polypeptide of claim 201, comprising the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2 or a fragment of contiguous amino acids of amino acids 16 to 496 of SEQ ID NO:2 wherein the fragment has aminopeptidase activity.

Claim 212 (previously presented): The polypeptide of claim 208, which is obtained from an Aspergillus strain.

Claim 213 (previously presented): The polypeptide of claim 212, which is obtained from an Aspergillus oryzae strain.

Claim 214 (previously presented): The polypeptide of claim 207, which is encoded by a nucleic acid sequence which hybridizes under medium stringency conditions with the nucleic acid sequence of nucleotides 46 to 1488 of SEQ ID NO:1 or its full complementary strand, wherein medium stringency conditions are defined as prehybridization and hybridization at 42°C in 5X SSPE, 0.3% SDS, 200 µg/ml sheared and denatured salmon sperm DNA, and 35% formamide.

Claim 215 (previously presented): The polypeptide of claim 214, which is obtained from an Aspergillus strain.

Claim 216 (previously presented): The polypeptide of claim 215, which is obtained from an Aspergillus oryzae strain.

Claim 217 (previously presented): The polypeptide of claim 207, which is encoded by a nucleic acid sequence which hybridizes under high stringency conditions with the nucleic acid sequence of nucleotides 46 to 1488 of SEQ ID NO:1 or its full complementary strand, wherein high stringency conditions are defined as prehybridization and hybridization at 42°C in 5X SSPE, 0.3% SDS, 200 µg/ml sheared and denatured salmon sperm DNA, and 50% formamide.

Claim 28 (previously presented): The polypeptide of claim 217, which is obtained from an Aspergillus strain.

Claim 249 (previously presented): The polypeptide of claim 218, which is obtained from an Aspergillus oryzae strain.

Claim 200 (previously presented): The polypeptide of claim 207, which is encoded by the nucleic acid sequence contained in plasmid pEJG18 which is contained in *E. coli* NRRL B-21677.

Claim 21 (previously presented): The polypeptide of claim 207, wherein the polypeptide hydrolyzes a substrate containing Ala, Glu, Gly, or Pro at its N-terminus.

Claim 222 (currently amended): A method for producing the <u>isolated</u> secreted polypeptide of claim 207 comprising (a) cultivating a microbial strain, which in its wild-type form produces the polypeptide, in a medium under conditions suitable for production of the polypeptide; and (b) recovering <u>isolating</u> the polypeptide from the medium.

Claim 223 (currently amended): A composition comprising the <u>isolated secreted</u> polypeptide of claim 297 and a suitable carrier.

Claim 224 (previously presented): The composition of claim 223, wherein the polypeptide comprises an amino acid sequence which has at least 90% identity with the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2.

Claim 225 (previously presented): The composition of claim 225, wherein the polypeptide comprises an amino acid sequence which has at least 95% identity with the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2.

Claim 226 (previously presented): The composition of claim 225, wherein the polypeptide comprises an amino acid sequence which has at least 97% identity with the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2.

Claim 227 (previously presented): The composition of claim 223, wherein the polypeptide comprises the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2 or a fragment of contiguous amino acids of amino acids 16 to 496 of SEQ ID NO:2 wherein the fragment has aminopeptidase activity.

Claim 228 (previously presented): The composition of claim 227, wherein the polypeptide is obtained from an Aspergillus strain.

Claim 229 (previously presented): The composition of claim 228, wherein the polypeptide is obtained from an Aspergillus oryzae strain.

Claim 200 (previously presented): The composition of claim 223, wherein the polypeptide is encoded by a nucleic acid sequence which hybridizes under medium stringency conditions with the nucleic acid sequence of nucleotides 46 to 1488 of SEQ ID NO:1, or its full complementary strand, wherein medium stringency conditions are defined as prehybridization and hybridization at 42°C in 5X SSPE, 0.3% SDS, 200 µg/ml sheared and denatured salmon sperm DNA, and 35% formamide.



Claim 232 (previously presented): The composition of claim 231, wherein the polypeptide is obtained from an Aspergillus oryzae strain.

Claim 233 (previously presented): The composition of claim 223, wherein the polypeptide is encoded by a nucleic acid sequence which hybridizes under high stringency conditions with the nucleic acid sequence of nucleotides 46 to 1488 of SEQ ID NO:1, or its full complementary strand, wherein high stringency conditions are defined as prehybridization and hybridization at 42°C in 5X SSPE, 0.3% SDS, 200 μ g/ml sheared and denatured salmon sperm DNA, and 50% formamide.

Claim 284 (previously presented): The composition of claim 235, wherein the polypeptide is obtained from an Aspergillus strain.

Claim 235 (previously presented): The composition of claim 234, wherein the polypeptide is obtained from an Aspergillus oryzae strain.

Claim 236 (previously presented): The composition of claim 223, wherein the polypeptide is encoded by the nucleic acid sequence contained in plasmid pEJG18 contained in *E. coli* NRRL B-21677.

Claims 237-240 (canceled).